Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method, comprising: ~~for~~

determining a plurality of filter coefficients for a digital filter for a Universal Mobile Telecommunication System (UMTS), ~~in which the filter coefficients are predetermined and modified in a filter design program, comprising the steps of~~the determining including:

dividing ~~the predetermined~~initial filter coefficients ~~(b_v)~~ by a ~~same~~ scaling factor ~~(s)~~, to result in a plurality of scaled filter coefficients ~~(β_v)~~;

quantizing the scaled filter coefficients ~~(β_v)~~ so that only a certain maximum number (n) of "1" bits are counted from a most significant bit onwards; ~~and in that~~

determining a respective quantization error of each quantized scaled filter coefficient ~~is determined~~ relative to a respective one of the ~~predetermined~~ initial filter ~~coefficient~~ coefficients; and

repeatedly modifying for a ~~predetermined~~ number of times the scaling factor ~~(s) of a respective~~and determining which scaling factor ~~(s_v) being set~~results in ~~which the~~a quantization error ~~becomes a predetermined~~having minimal error value, and ~~in that~~

implementing in the filter the filter coefficients ~~(β_v) having~~resulting in the minimal error ~~are implemented in the filter~~value.

2. (Currently Amended) A method as claimed in claim 1, ~~characterized in that~~wherein the number (n) comprises one of four, three, or two.

3. (Currently Amended) A method as claimed in claim 1, wherein ~~characterized in that~~ if again a "1" bit follows the last "1" bit, a rounding is effected from the last bit onwards.

4. (Currently Amended) A digital filter for a Universal Mobile Telecommunication System (UMTS)~~, in which the digital filter coefficients are processed with the signal~~, comprising

means for dividing a plurality of binary filter coefficients ~~(b_v)~~ by a scaling factor ~~(s_c)~~ to result in a plurality of scaled filter coefficients ~~(β_v);~~;

means for quantizing the scaled filter coefficients ~~(β_v)~~ so that they do not exceed a ~~predetermined~~ selected number (n) of "1" bits from a most significant bit onwards~~, in that~~; and

adder stages ~~ADD(3)~~ for processing the scaled and quantized filter coefficients ~~(β_4)~~ with ~~the~~ an input signal.

5. (Currently Amended) The digital filter as claimed in claim 4, comprising a final stage ~~(4)~~ for processing an output signal by a factor ~~(s_c)~~ reciprocal to the scaling factor.

6. (Currently Amended) A digital filter as claimed in claim 4, ~~characterized in that~~wherein each adder stage ~~(3)~~ comprises n-1 adders ~~(9, 10, 11)~~ and ~~a~~ means for multiplying an input by 2^j by shifting the input by i ~~(5, 6, 7, 8)~~, the input being a respective one of the scaled and quantized filter coefficients.

7. (Currently Amended) A digital filter as claimed in claim 4, ~~characterized in that in~~ wherein the adder stages ~~(3) and a number n~~ include first and second adder stages respectively including:

respective numbers of ~~a~~ multiplying means for multiplying an input by 2^j by shifting the input by i ~~(5, 6, 7, 8) is~~, wherein the respective numbers of multiplying means are different; and ~~the number~~

respective numbers of adders ~~(9, 10, 11) is accordingly~~ coupled to the respective multiplying means, wherein the respective numbers of adders are different.

8. (Currently Amended) A digital filter as claimed in claim 7, ~~characterized in that individual~~wherein the adder stages ~~(3) have~~include a third adder stage having only a single multiplying means ~~(5)~~ for multiplying an input by 2^j by shifting the input by i.

9. (Currently Amended) A digital filter as claimed in claim 4, ~~characterized in that the mean~~ wherein each adder stage comprises n-1 adders and means for multiplying an input by 2^j by shifting the input by i, the input being a respective one of the scaled and quantized filter coefficients, wherein each of the means for multiplying ~~(5, 6, 7, 8) an~~ the input by 2^j by shifting the input by i is formed by connections of ~~its~~ inputs and outputs of a multiplier stage.

10. (Currently Amended) A digital filter as claimed in claim 4, ~~characterized in that the~~ wherein each adder stage ~~(3)~~ comprises:

n-1 adders;

multiplying means for multiplying an input by 2^j by shifting the input by i, the input being a respective one of the scaled and quantized filter coefficients; and

a programmable selector ~~(12)~~ which in accordance with ~~its~~ programming connects the multiplying means ~~for multiplying an input by 2^j by shifting the input by i (5, 6, 7, 8)~~ with the adders ~~(9, 11)~~.

11. (Currently Amended) The method according to claim 1, further comprising

multiplying ~~(5, 6, 7, 8)~~ an input by 2^j by shifting the input by i ~~with~~ and summing shifted values using a plurality of adders ~~(9, 11)~~.

12. (Currently Amended) The method according to claim 1, further comprising:

multiplying an input by 2^j by shifting the input by i ~~(5, 6, 7, 8), which is~~using a multiplier formed by connections of ~~its~~ inputs and outputs.

13. (Currently Amended) The method according to claim 11, wherein ~~adders stage (3) comprises~~ the multiplying is performed using a plurality of multipliers, the method further comprising selectively connecting the multipliers with the adders using a programmable selector ~~(12) which~~ in accordance with ~~its~~ a programming ~~connects the shifted input with the adders (9, 11)~~.

14. (New) A method, comprising:

producing a plurality of scaled filter coefficients by dividing initial filter coefficients by a scaling factor;

quantizing the scaled filter coefficients so that only a certain maximum number (n) of "1" bits are counted from a most significant bit onwards;

determining respective quantization errors of the quantized scaled filter coefficients relative to the initial filter coefficients, respectively; and

modifying the scaling factor and determining which scaling factor results in a quantization error having minimal error value, and

implementing in the filter the filter coefficients resulting in the minimal error value.

15. (New) A method as claimed in claim 14, wherein the number (n) comprises one of four, three, or two.

16 (New) A method as claimed in claim 14, wherein if again a "1" bit follows the last "1" bit, a rounding is effected from the last bit onwards.

17. (New) The method according to claim 14, further comprising:

multiplying an input by 2^j by shifting the input by i using a multiplier formed by connections of inputs and outputs.

18. (New) The method according to claim 14, further comprising multiplying an input by 2^i by shifting the input by i and summing shifted values using a plurality of adders.

19. (New) The method according to claim 18, wherein the multiplying is performed using a plurality of multipliers, the method further comprising selectively connecting the multipliers with the adders using a programmable selector in accordance with a programming.